

A NEW FRESH-WATER BIVALVE (CORNEOCYCLAS)  
FROM THE MOUNTAINS OF ECUADOR.

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The species described herewith was collected by Dr. S. Austin Davis, of 61 Buena Vista avenue, Yonkers, New York, in the valley of the Chanchan River, Ecuador, South America, at an altitude of about 7,000 feet. Of the specific locality Doctor Davis says:

The Chanchan cuts through the western Cordillera and empties into the Chimbo at the base of the western foothills, at a station on the Guayaquil and Quinto Railway called Bucay. The Chimbo, after about 55 miles, enters the Guayas River a short distance above Guayaquil. The Guayas waters flow to the Pacific Ocean. The tiny stream in which the mollusks were found falls into the Chanchan at about 4,000 feet elevation above the sea (20 miles above Bucay) and takes its rise high up the mountain side, some 3,000 or more feet above the entrance to the Chanchan. It is quite a stiff climb to get there from the valley bottom, and in its course there are two or three vertical falls.

**CORNEOCYCLAS DAVISI**, new species.

Shell of medium size, moderately oblique, well inflated, greyish horn-colored with straw-colored ventral margin, having the nepionic portion somewhat constricted off from the post-nepionic part of the shell. Umbones scarcely projecting above the hinge line. Posterior dorsal margin sloping a little more abruptly than the anterior and only about two-thirds as long. Area below the posterior dorsal margin well inflated, that below the anterior dorsal margin somewhat compressed. Posterior border well rounded and evenly curved. Anterior border somewhat produced in the middle and therefore decidedly less evenly arched than the posterior. Ventral margin forming an even sweeping curve. Entire outer surface marked by deeply incised concentric grooves which are somewhat variable in strength, those on the initial portion of the nepionic shell being finer than those on its margin. The post-nepionic part of the shell is divided

into a number of stages formed by the variation in the strength of the incised lines. In the type there are five, the first being immediately below the nepionic portion, while the rest divide the remaining part into equal segments. The narrow darker bands, represented by irregular stronger sculpture, may mark resting periods. In addition to the incised concentric sculpture the entire surface is marked by microscopic crinkling, especially in the grooves. Interior bluish-white. Hinge slight, long, curved. Ligament rather short, partly internal. Cardinals: in the right valve one, decidedly curved and much stronger and more elevated posteriorly where it bends downward over the hinge plate: in the left valve two, the upper slen-



CORNEOCYCLUS DAVISI BARTSCH. MAGNIFIED 5.

der and obliquely curved and but slightly elevated, the lower small, somewhat triangular and a little more elevated than the upper. Laterals: double in the right valve, slender, curved, lamelliform, the ventral considerably more strongly developed than the dorsal: single in the left valve, the anterior one bearing a cusp-like projection on its middle, while the posterior one is best developed at its posterior extremity.

The shells of fresh specimens, when viewed by transmitted light, appear uniformly very minutely dotted as if finely punctured.

The type measures: Length 5.0 mm.; height 4.0 mm.; diameter 2.7 mm. The largest specimen, a single valve, measures: length 6.0 mm.; height 4.9 mm.

The lot, consisting of the type and two complete specimens and two single valves, is entered as Cat. No. 198053, U.S.N.M.